

P. Kropotkin Mutual Aid A factor of evolution

popular edition (first ed. 1902)

1919

和识参参書

相 丞 扶 目力

室伏高信识

春秋社:世界大思黎全集, 34 1928

Competition n Darwin = 317 x 12 Trus n?

p. 3. This view however, I could not occept, because I was persuaded that to see in that war a condition of progress, was to admit something which not only had not get been proved, but also locked confirmation from direct observation.

p.52 The idea which permeates Darwin's work is certainly one of real competition going on within each animal group for food, safety, and possibility of leaving an offspring. He often speaks of regions being stocked with animal life to their full capacity, and from that overstocking he inters the necessity of competition. But when we look in his work for real proofs of that competition, we must confess that we do not find them sufficiently convincing. If we refer to the paragraph entitled "struggle for life most severe between Individuals and Variotics of the same Species", we find in it none of that wealth of proofs and illustrations which we are accustomed to find in whatever, Darwin wrote. The struggle

between individuals of the same species is not illustrated under that heading by even one single instance: it is taken as granted.

which were not to their and a management

動物學· ngif competition かオコルキド人口医科力?

p.58 The actual numbers of animals in a given region are determined, not by the highest feeding capacity of the region, but by what it is every year under the most unfavorable conditions.

The numbers of horses and cattle thus always remain beneath what they otherwise might be; all the year round there is food for fire or ten times as many animals and yet their population increases extremely slowly. But as soon as the Buriate owner makes ever so small a prevision of hay in the steppe, and throws it open during days of glazed frost, or heavier show-fall, he immediately sees the increase of his herd.

p. 60. Like facts, all tending to reduce the importance given to competition, could be produced in numbers. Of course, it might be replied, in Darwin's words, that nevertheless each organic being "at some ferred of its life, during some season of the year, during each generation or at intervals has to struggle for

life and to enfler great destruction," and that the filtest survive during such periods of hard struggle for life. But if the evolution of animal world were based exclusively, or even shiefly, upon the survival of the fittest during periods of calamities; if natural selection were limited in its extrins to periods of exceptional drought, or sudden changes of temperature, or inundations, retragression would be the rule in the animal world.

it. Parwin , struggle for life = = > 1 aspect or n - 7 n overpopulation , 56%. Bit & separate individual 182 = food & safety & 6+67 + 2 n, direct + struggle + 2 n competition = 7 n.

Kropotkin n =1 = 12 1 struggle 1 ns ; 7-1 = 1n, 8

公子=アッテ、キウメラ まること 225+1 ソクトウンTriggle ナキコス ヨカト overpopulation がなトナウモノが、リモリモ 日ニテニアジテル キのメテ 祥ニレの オンライ、トイクストラ おけあった。マズラップ ませマル ストエバン トノフェン、マボノコケニインティル、

where animal life swarms in abundance, facts of real competition and struggle between higher animals of the same species come very seldom under my notice, though I eagerly searched for them.

マヒン対: Kropotkin: キニ, struggle / なんするみ、ツノ 139トンテ、上かる, stephe=オリテ、sereve+を入所かま まマアンファップル、

240, 211) \$ 1512. \$ 1 & T = 752: 7 to st f77, deep snow f74. 127, 1220 \$ 27 to food 1 scarcity + 1924 7 505, 211 food 1 scarcity + 1924 7 505, 211 600 1 scarcity + 1924 7 500 8 100

モケーラ録はエンテオウネバナラナイ、ソカスルや姿がアルト見のト

vis use direct competition + 17 Els, 70 1x + 401 k, selection が1959コトハ 事業デナチャルナラナイ、in 20001 evolution 1 theory = 7 17, competition & selection 13 504422414441.

selectionがナンラオノ 井多タトハテ 付われティル 12に、ソコニハ evolution = stan \$ 35 8 13 x 3 x 3 x 3 x 7 x x , un progression + EIF Pay + retrograssive + EIF Pay + ULIN 81110 18 F 70%. Evolution " AT 5 2 12 progressing 7 \$ \$ 440 ナイ、 ピイヒ = 世当 がハナイ

=15 7+ =" 1 x" L s' tropotkin", evolution 7 11 5 + まちゃつトテラカをエティナイ、 2011被,海线产品。

competition = 2 2 n mutual aid

mutual aid " mutual struggle in competition = 15=7 it it try idea Fpin von 1880 I= Professor Kessler (Kropothin = a+1, the well-known roologist + pic - p.3) =99, Russian Congress of Naturalist (\$PSR = DUN DEP 特物是看会了最),原口,替表如的 On the Law of Mutual Aid "+10情读9も17, 最初トンル、

Kropotkin = 2.25 31用+14、Kossler, 言葉ハッギノロシ

P. 16.

I obviously do not deny the struggle for existence, but I maintain that the progressive development of the animal kingdom, and especially of mankind, is favoured much more by mutual support than by mutual struggle . - - All organic beings have two essential needs: that of nutrition, and that of propagating the species. The former brings them to a struggle and to mutual extermination, while the needs of maintaining the species bring Them to approach one another and to support one another. But I am inclined to

think that in the evolution of the organic world — in the progressive modification of organic beings — mutual support among individuals plays a much more important part than their mutual struggle."

it. Kessler & evolution 7 progression + 187 = 74 m.

11 + 12 = , Kessler & struggle 7 food 1 10 12 miles

nutrition = 36 s, ou= 21 - 7 mutual aid 7

reproduction = 36 s or 21 + 27 = 7.

is i reproduction: struggle 5" 1 2 = \$ 7 = 7 +++5?

Kropotkin . Kassler 1 > 1 % x = 11 to to c + 1+1.

it keasler e Kropotkin e ree, struggle rmutual aid, 成为了以及100+211 两条12 competition e 弘立

It is a book on the law of Mutual Aid, viewed at as one of the clief factors of evolution -- (p.8)
not on all factors of evolution -- (p.8)
Then EDEMONDED +,

Ronssean had committed the error of excluding the beak- and-claw fight from his thoughts; and Huxley committed the opposite error; but neither Ronssean's optimism nor Huxley's pessinism can be accepted as an impartial interpretation of nature. (p.14)

トラとシティルトンンカラクラル

· Keisler=対なル異方義

. \$3. In one point only I could not entirely undorse Kessler's view, Kessler alluded to paroutal feeling and care or progeny as to the source of matual inclinations in animals. However, to determine how for these two feelings have really been at work in the evolution of sociable instincts, and how for other instincts have been at work in the same direction, seems to me a quite distinct and a very wide quation, which we hardly can discuss yet. It will be only after we have well established the facts of mutual aid in different classes of animals, and their importance for evolution, that we shall be able to study what belongs in the evolution of sociable feelings, to parental feelings, and what to sociability proper - The latter having evidently its origin at the earliest stages of the evolution of the animal world. perhaps even at the colony-stages. I consequently directed my chief attention to establishing just of all, the importance of the Mutual And factor

of evolution, leaving to uttorior research the task of discovering the origin of the Mutual Aid instinct in Nature.

性 ことのうをおと - on introduction イヤ・ネッキャル まがら PM - Nutual Aid +17/11、Mutual struggle =25をル モノトイクタリル、モット オイ、Sociality トナックトアラス・ ・モノトイクタフェモ なる ポレル、

ナキ、キカコンコノintroduction中は、技をかまスルコト= コリテ、秋/夏D9の月がコンテナンクル

フカイロティハコギニ、馬、野、カ、北、水学に下に、日季ラ ツクルノモ、投が子が、シメニ pack アックルノモ、動物ノ 子供が世ピタフトレルルは、love =由来シティナイン メンテコスニモ 意はいりりますことに同じ地美二行をトダマッテクル ーソレス 彼がアムール アカラ事実デアル、アトダカモ28、不是中 Extensive original+, 2 ++ data Fra, 252, 465 113 in motival aid 2 7 in data & K- madthip 21974, It is a feeling infinitely wider than love or personal sympathy - an instinct that has been stously developed among animals and men in the course of an extremely long evolution, and which has taught animals and men alike the force they can borrow from the practice of mutual aid and support, and the joys they can find in social life. (p.6) + 38 = 9.

アルイルマタ

which Society is based in mankind. It is The conscience — he it only at the stage of an instinct — of human solidarity. It is the unconscience recognition of the force that is the rowed by each

man from the practice of mutual aid; of the close dependency of every one's happiness upon the happiness of all; and of the sense of justice, or equity, which brings the individual to consider the rights of every other individual as equal to his own. Upon this broad and necessary foundation the still higher woral feelings are developed. But this subject his outside the scope of the present work, and I shall only indicate here a betwee, Justice and Morelity, which I delivered in reply to Huxley's 'Ethics,' and in which the subject has been treated at some length.

- The second of the second of

Sociality +1197 表味 245

Krapathin , 美味 2~ mutual aid (太真,) is sociability =いチャハ、ナキ・ア・革あが養をトナック.

p. 47. Sociability - that is, the need of the animal of associating with its like - the love of society for society's sake, combined with the joy of life, only now begins to receive due attention from the zoologists. We know at the present time that all animals, beginning with the arits, going on. to the birds, and ending with the highest mammals, are fond of plays, wrestling, running after each other, trying to capture each other, teasing each other, and so on. And while many plays are, so to speak, a school for the proper behavior of the young in mature life, there are others, which, apart from their utilitarian purposes; are, together with dancing and singing, mere manifestations of an excess of forces - "The joy of life; and a desire to communicate in some way or another with other individuals of

The same or of other species - in short, a monifestation of sociability proper, which is a distinctive feature of all the animal world. Whether the feeling he fear, experienced at the appearance of a bird of proy, or 'a fit of gladuses' which bursts out when the onimols are in good health and especially when young, or merely the desire of giving play to an excess of impressions and of vital power - the recessity of communicating impressions, of playing, of chattering, or of simply feeling the proximity of other kindred living beings pervades Nature, and is, as much as any other physiological function, a distinctive feature of life and impressionability. This need takes a higher development and attains a more. teautiful expression in mammals, especially suideltheir young; and still more among the birds; but it perunder all Nature, and has been fully observed by the best naturalists,

with the party of the same and the first

my was it is many with travelle the

it is a constitute

as a characteristic to the more motivative as a characteristic in more harmones a continue to any one of a feet and received a continue to a c

and it is the almost are a number oner, a. + 15 bote senado e sea. 1 and eres o m massar view supply o' reca love I ar rease or in robbine class, with Dr sites and and here sending and better to gette, a consummed and reids, retains were it on " non magner I according to white on is it, since a set to super pla tations of " the side and a man reference of these icher tarrich and were etter duringered to thems our was in the law, the the sale that a rescued ordered to leave I exist amost To had an all the rained south or coilera of s in the I have a reserve in the long rune " I you was pringers to a comme now

of adviduars endowed with the fit of the at one. The cummerest and the somewhest a colonistic in favore to be to who understand the annihilation of sociable (4) and maken import.

ita、シを贈った会員と、かなる。ましてAに、A 大人なでも、ので

tia, issiens without the soundaries is

tia, issiens with agre of moderness is

their of the foreground agree of the first

AD AN 12 CT - # 10 - 51 -

n connected and off the form

positive and 1 to 125

九日 ・ も ライ・星がカラン

to will is no much a fact of nature as and it stragge I course it would be sytronely authorit i retunde reacus roughle, the relative remener mosts is of esta time series of facts. Erry a result to an inducer test, and ash Not. . Who are the liters : Toss who are continues at nar noth each other as those to a most one another? we at once see that the record which against route of materal aid as under the one titlet. They have more the cost to writer, and they attend in their mosety, down the replact describer to intellige is and old of granisation. It the non access fact ashed can be trought converd is subject that were not taken into account the man sagery you that mutual and is as much a law - and all all as in their straggle, but that an a corter is event on the most probable the a fair quals importance.

organisation of the second of the organisation of the second of the seco

最か就事/教教のから

and these are the natural outressed of the main as and while the encourage at every star. I the busy aux forcesses times. It would be interested and necessaries resulted in the territorium of arther execution italian of he in or anth. The immerise de execute of individual initiation which, is its term and tenth led to the development - that his, and varied intelligence which connect het start the name of corner.

or dien for which had progress or a re or dien for which had progress or a re one of a restat security - variety ale security to be in a great to a 10 a 10 a 4 d

.. Tiese spriese which werend on whiter. alandon it are drowed to deer water Trees assimate which know best now to know it is the greatest chances or surveil and or per ex evolution, afterior, " en en en en en en en esta esta en in each of the excelled comme and on the and was as , we to web. I as an in the highest verticiates and ever all me is an the test proof of Teer areas on the the lectural facility who e every have a le agrice with Jaruna that it is the new months! arm in the stream for the and the or wire factor of cultur evolution, he also not admir that wellingthe is an energy of a record formets Larguage instation and recumulated recover are so many elevation of area in intelligence which the unseriable a invent of deer d. " all? we bund, at the 125 H was was in amine . the acts, the arrow and the nontringe as combining the analyst to street with he had wont decilement of will find.

Alastania, the and proces to do the first

A Side interest of interest of the state of

yesではいっている いまりんでき 浸着りしゃ

The donate of the form of the

Min no madelly 保まりからいていい サマケンにでいるlists にいっていい 海魚にいか

seciability . 88 19

p. 22. Costainer, within to acts, on the said of even the termentes, now moves to the complete a higher solidarily essibility 12 " " the cas's of the species. In 'rat report True about min. not attacad a derree or decerrent. do not find some among our stilling second . and religious resters. In a recent stricts harden extra a worst the construction. the next. However a summer received in the iternica excelle and in the inches described by For so hard There is Sales : and their maria a lest ... is of These is onice were seen election er the colonie, and hat he is a cities common didirect, at a contract to Macicon son a wire naion a mis to 1700 mests . is now to make " . " lung a servert it ig . and in the " as dose and " " " " " " terms".

rent of the cite leng the set go of the or the act of the or the set of the se

手 (1) process Potal process process

Socialization ser

trub. We then see even ron the out . Under territory for the in secretion is no exercise in the animal world . It is the took of the fact of there, and it was not to the at sure with the opinion or i roles.

1 : 1 60, 7 ; 2 . 7 /

后)奏。

Association was don't away as a conall degrees or inciter, and present up to the
grand dea a very to the early or consider
dealessed in times a Colonia in a large and
beingdom. But is a long as a second a
seale of exclution or a second in a large
most and more research to the early
instructive or in more reasoners. With the eight
worthhales of a more on a second to the
to the salutaction of a grown as the reof the salutaction of a grown as the reof the salutaction of a grown as the re-

Course's a property of the course

All Carena and All All Control of the Control of th

state the second of the come.

The second of the second of

material, a trat do in it of the contet.

of social lies. With rest remeds to account the hard do not do thing or har care structe when it such strong with single paid and a do not are land out in a same and it is a single guarantee to account or assist the hard and and sould sould be seen and

マイカルモンなる。

man of have ite, senou in it is a to a control of the control of t

615

and seems, by the contract of the seems of the second seems, by the contract of the second seems of the second se

a construct and to exact an error,

1、 1000、最新の人の第二次第1番ラファネルデザル 2000年第1章 (2000年)

southing mi

2.42. Iste in secretion and the real of the large tamble of corner which is chosen to and horses and donkers of me to the large tamble horses and donkers of me to the large and the mestange, the simple of the large and the large in mestange is a secret to the large and the large in mestange is a secret to the large and the

were it not for The secross stirl.

\$\begin{align*}
\text{\$\frac{1}{2} \cdot \frac{1}{2} \cdot \frac{1

大いけん、カショウ もかりょう

The p. 43 - 31 - 50 or for first count in the

- But serios the over striking willist of meetings summer to accept the constraint unarators + 12 . Clar - 12 12 1 12 ones on the fame Validas I want to sail plateau and is tribor mass . " .. " on my now none in a consider to being room and further to a car our the man preses on my way to be a consider and in your there purphed and on the tier " will rester mountable a system out, it is in later I was Trans and a to have and to the end of Otoper remember to be a of that perforecent goings which a smooth bierces in "a ! min-air il"in .. across of cities to be a design of a to Sondari. I could do it were to the villages of that gores in to a silvering. Arcaner Transport and Transport

do s were crossing the mover wirese it is harronest is rider to reach the receiveda. · si i com dous in societaion liberia and it some that will up the men the Consoch were withours " to doer as " ... creased to any in which already realed a good siar or ice, thousand were fixed every dow, and "he exercise mirer in ele commende and misestione were reser seen To word or source and they are mist I see ear ca'su fer by an cor wand . I - at exist a the Steat Tringer, week cupe id "o des to make a dispirate o" in the o' reor no this reallends in the east A to Dusse nominana, I deed, a resi does inter to Dorsserong was also burren under such two or three yest deer, how, to these this maginery the immercial Ter, toru sinos se ig ac breat 31.7 1 -come which the scaticod arons or deer music in sec and for a misration which was indicate and the treasure of exist, once

circumstances, and remests to district of which had to be one one it is all the don't came to the common was 5 crossing is Amer enter south was it is now . . . once cannot but desper a livere "is a . . . of sociable " des and in " as into the int annais. The fact is not the how in . it we remember that to be and it is ? Ancerica disposed in same somes o undiration Cone son the service in Areal rembers is in some put in a men were mode up in an arrector of the groups which never next tother i'd yet, when wellest arose ou me ... house of scottined over an are a feet came loss There and wale in these is and ectumns, recorded in Area. " To red. of indudican, much i must one a Dreckling bag.

is more signer and the second

the real content of resident to the

・1 (音音) アルティ、デー カンツ さむ。 コルデー (手のマス、ハルモーがとく アルルド

migrature local films the time to

嫌でっている ちゃっこい

++, mutual dislike ++, 172+7"7" = 11 +, 450

相立対立トリクをすたいicompetition=ですル か 102補足トリクをデル cooperate マティル オクシテーリコン 同位対会 アギ魚をひかれたります。 オイテ、coordination + リテアル

かり、かり、 接いかいかまれないをかめ + なるえーカッ 普像的+まと表 ール、コレタ compilition デモ、cooperation デモドッチョレナイ モノデアにコトラ そのル

ナナ,225 10テイル have h rabbit +1月イルト
191427 高=31用サルティルか、1359、22:12
サルテナル3かたモノカドンカ、確メテミル以東がアルラで
いナイカト 黒つトル、こめらをなり、シメニカウンテまり、リカマデ、 様ミロケイノがリトイラのケニハイカスダアのり、

have + rabbit 1885

p. 41. At any rate, our common haves, which do not gather in societies for life in common, and which are not even endowed with intense parental factings, cannot live without coming together for play. District de Winckell, who is con-(p.42) sidered to be among the hest acquainted with the habits of hares, describes them "as passionate players, becoming so intoxicated by their play that a have has been known to take an approaching for for a playmate, As to the rabbit, it lives in societies, and its family life is entirely built upon the image of the old patriarihal family; the young ones being kept in absolute obedience to the father and even the grandfather. And here we have the example of two very closelyallied species which cannot bear each other - not because they live upon nearly

the same food, as like cases are too often explained, but most probably because the passionate, enciountly individualist have connot make privide with that placed, quiet and salmissive creature, the rabbet. Their tempers are too widely different not to be an obstacle to friendship,

the property ample decided in

with regularization of the Continuous of the Continuous

接いり=ヨル新統,成立-exterminationをつき

要約2mtsが、極10か=20戸 計校が出来を上かる言 =1, competition=20戸, new species が parent species す 3色減サロタ、アルイル モャスエタト タエルダー 車ガナイ、リコニル 両名トモニ トはまれたニア、共存シロル医ガアル、マタッルか合ニル、西名ノ同こイワナ じゅん がナクナンテモ イイト カケテアル

マルト 標:のケ系をノ主馬を完全ニー語シティル、 最后二書キノコンテナクイキ 与ブミデアル、

if the physical and the biological conditions of a given area, the extention of the area occupied by a given species, and the habits of all the members of the latter remained earchanged — then the sudden appearance of a new variety might mean the staving out and the extermination of all the individuals which were not endowed in a sufficient degree with the new feature by which the new variety is characterized. But such a

combination of conditions is precisely what we do not see in Nature. Each species is continually rending to enlarge its abode; migration to new abodes is the rule with the slow smail, as with the swift hird; physical changes are continually going on in every given area; and new varieties among animals consist in an immouse number of cases - perhaps in the majority - not in The growth of new weapons for snatching the food from the mouth of its congeners - but, as Wallace himself shows in a charming paragraph on the 'divergence of characters (Darwinism, p. 107), in forming new habits, moving To new abodes. and asking to new sorts of food. In all such cases there will be no extermination even no competition - the new adaptation being a relief from competition if it ever existed; and yet there will be, after a time, an absence of intermediate links, in consequence of a mere survival

of these which are best fitted for the new conditions—as everly as under the hypothesis of extermination, of the parental form. It hardly need be added that if we admit with Spencer, all the Lamarckians, and Darwin himself, the modifying influence of the surroundings upon the species, there remains still less necessity for the extermination of the intermediate forms.

- 1 る何意的ではするにもりかすれるデナンテライ
- 2 特撮や生活言葉のヨメニ 美マルモハアル
- 3、 倒然がするのはこら記事マサケルが着もなりたのラテル記が生ない一層に出る的楽はニメグマレティル
- 中、非社支の大致の息目は彼らい習生まれ

P.72

をよっ人をかり、生活をおからとかずかを、形式=ヨッテヤるメナカッタコトナの月はこび立この-

- 家族、人強性はモオケルをメデザナンラかデルー・人間ハー・最高を中の南流的かりいい同称十年方法 ノラダニ生活とディカロー・

27-3

一部物なト古人教学かいから、社会生活、最初期ノ野式人文義が、十つい子群デアルトノネーオイテー致ら

P.98

10311813京能が未ず部族的発一を放け41回り、我族回りニキイテル、「全国・フォノる人」ノネシリルをヒデアルレル

一氏柱194=10到的京族,出现2021年,少型的二大主, 我一年的2至1年加、10到的京族、10到的文学是上 第一書稿一年基礎工作